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PATENT

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1-8 (canceled).

9. (new): An avoidance device for ship, allowing said ship the avoidance of floating or slightly submerged objects situated on its route of the ship or in a zone close to this route, comprising:

two transmitters of acoustic waves spaced apart from one another,
an acoustic receiver, whose reception band is suitable for the transmission frequencies of the transmitters,

means of processing of the received signals, said processing means making it possible to perform, through the echos received, a measurement of the difference of the propagation times of the waves transmitted by each of the transmitters as well as a measurement of the Doppler effect which affects each of the transmitted waves; said processing means thus determining the position of a the object having returned an echo.

10. (new): The device as claimed in claims 9, wherein said processing means determine the position of an object on the basis of the calculation of the temporal deviation ΔT and of the Doppler frequency deviation ΔF_d existing between the two waves reflected by said object, a

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reflected wave originating from the first transmitter, and the other reflected wave originating from the second transmitter.

11. (new): The device as claimed in claim 9, wherein said two transmitters emit waves of distinct frequencies or of different waveforms.

12. (new): The device as claimed in claim 11, wherein said processing means determine the position of an object on the basis of the calculation of the temporal deviation ΔT and of the Doppler frequency deviation ΔF_d existing between the two waves reflected by said object, a reflected wave originating from the first transmitter, and the other reflected wave originating from the second transmitter.

13. (new): A multihull ship comprising a device as claimed in claim 9, the two transmitters of acoustic waves being disposed on different hulls and the acoustic receiver being disposed on any one of the hulls.

14. (new): A detection and avoidance system for a ship, said system permitting the said ship to detect and avoid objects approaching at a high speed, said system comprising devices according to claim 1, one device being mounted on each side of the said ship

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15. (new) A ship positioning control system, for controlling the entrance of a port comprising at least one device according to claim 9, said device being positioned at the entrance of the said port.

16. (new): A device for avoidance of submerged obstacles for multihull ship using acoustic waves, comprising:

a transmitter of acoustic waves disposed on one of the hulls.

two acoustic receivers disposed on different hulls,

means of processing of the received signals, these means making it possible to perform, through the echos received by each of the receivers, a measurement of the difference of the propagation times to the two receivers of the transmitted wave, as well as a measurement of the Doppler effect which affects each of the received waves; these processing means thus determining the position of a the object having returned an echo.

17. (new): The device as claimed in claim 15, wherein the transmitter simultaneously transmits two waves of different frequencies, each receiver having a reception band suitable for one of the transmission frequencies.